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Atty. Dkt. No. 047711-0325

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A method for formulating an enzyme comprising:

obtaining an organism with a glucose oxidase gene;

growing multiple colonies of the organism;

altering the environment of the colonies; and

screening the colonies to identify colonies with active glucose oxidase after altering the environment of the colonies.
2. (Currently Amended) A method for formulating an enzyme according to claim 1, wherein the organism is selected from a group consisting of ~~Aspergillus Niger, Penecillium funiculosum, Saccharomyces cerevisiae, and Escherichia Coli~~ Aspergillus Niger, Penecillium funiculosum, Saccharomyces cerevisiae, and Escherichia Coli.
3. (Original) A method for formulating an enzyme according to claim 1, wherein altering the environment of the colonies comprises introducing peroxide to the colonies.
4. (Original) A method for formulating an enzyme according to claim 1, wherein screening the colonies to identify colonies with active glucose oxidase comprises employing a substance that changes color in the presence of active glucose oxidase.

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5. (Original) A method for formulating an enzyme according to claim 4, wherein the substance is leuco-crystal-violet.

6. (Currently Amended) A method for formulating an enzyme according to ~~claim 5~~ claim 1, wherein screening the colonies to identify colonies with active glucose oxidase comprises checking for fluorescence.

7. (Currently Amended) A method for formulating an enzyme according to claim 1, wherein the method further comprises testing the colonies with active glucose oxidase for a predefined, desired functionality after screening the colonies to identify colonies with active glucose oxidase.

8. (Currently Amended) A method for formulating an enzyme according to claim 7, wherein the method further comprises continuing to alter the environments of the colonies until the colonies with active glucose oxidase are of a suitable number to proceed with testing the colonies with active glucose oxidase for the predefined, desired functionality.

9. (Currently Amended) A method for formulating an enzyme according to claim 7, wherein testing the colonies with active glucose oxidase for the predefined, desired functionality comprises employing glucose oxidase from the colonies in sensors.

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10. (Currently Amended) A method for formulating an enzyme according to claim 7, wherein testing the colonies with active glucose oxidase for the predefined, desired functionality comprises:

extracting glucose oxidase from the colonies;

immobilizing the glucose oxidase after extracting the glucose oxidase from the colonies;

placing the immobilized glucose oxidase in a sensor; and

testing the sensor.

11. (Original) A method for formulating an enzyme according to claim 10, wherein extracting glucose oxidase from the colonies comprises employing an ionic column to extract glucose oxidase from the colonies.

12. (Original) A method for formulating an enzyme according to claim 10, wherein extracting glucose oxidase from the colonies comprises:

removing the glucose oxidase from the colonies;

purifying the glucose oxidase; and

characterizing the glucose oxidase.

13. (Original) A method for formulating an enzyme according to claim 12, wherein removing the glucose oxidase from the colonies comprises grinding the colonies in a homogenizer into cell components.

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14. (Original) A method for formulating an enzyme according to claim 13, wherein removing the glucose oxidase from the colonies further comprises fractionating the cell components employing centrifugation and differential solubility after grinding the colonies in a homogenizer.

15. (Original) A method for formulating an enzyme according to claim 12, wherein removing the glucose oxidase from the colonies comprises disrupting the colonies into cell components via sonication.

16. (Original) A method for formulating an enzyme according to claim 15, wherein removing the glucose oxidase from the colonies further comprises fractionating the cell components employing centrifugation and differential solubility after disrupting the colonies via sonication.

17. (Original) A method for formulating an enzyme according to claim 12, wherein purifying the glucose oxidase comprises purifying the glucose oxidase by employing chromatography methods.

18. (Withdrawn) An enzyme formulated according to the method of claim 1.